Fig. 1

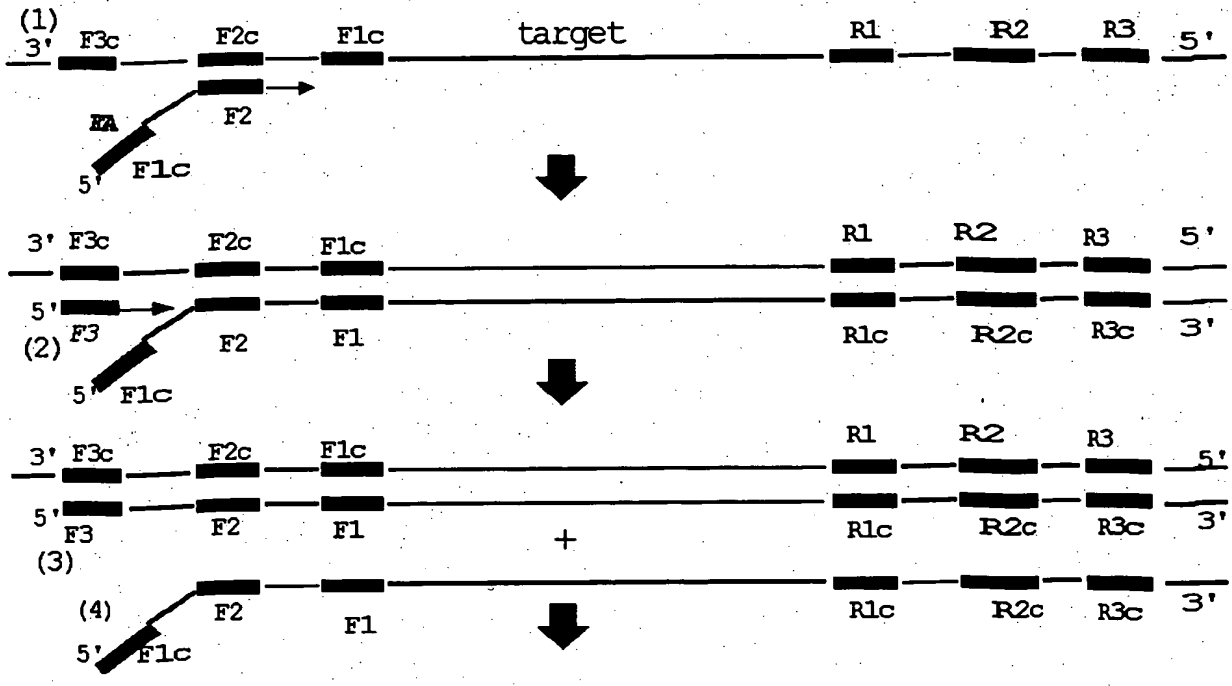

(1)
3'
F3c
F2c
F1c
target
R1
R2
R3
5'
F2
5'
F1c
3'
F3c
F2c
F1c
R1
R2
R3
5'
5'
F3
(2)
F2
F1
R1c
R2c
R3c
3'
5'
F1c
3'
F3c
F2c
F1c
R1
R2
R3
5'
5'
F3
F2
F1
R1c
R2c
R3c
3'
(3)
+
(4)
F2
F1
R1c
R2c
R3c
3'
5'
F1c

Fig. 2

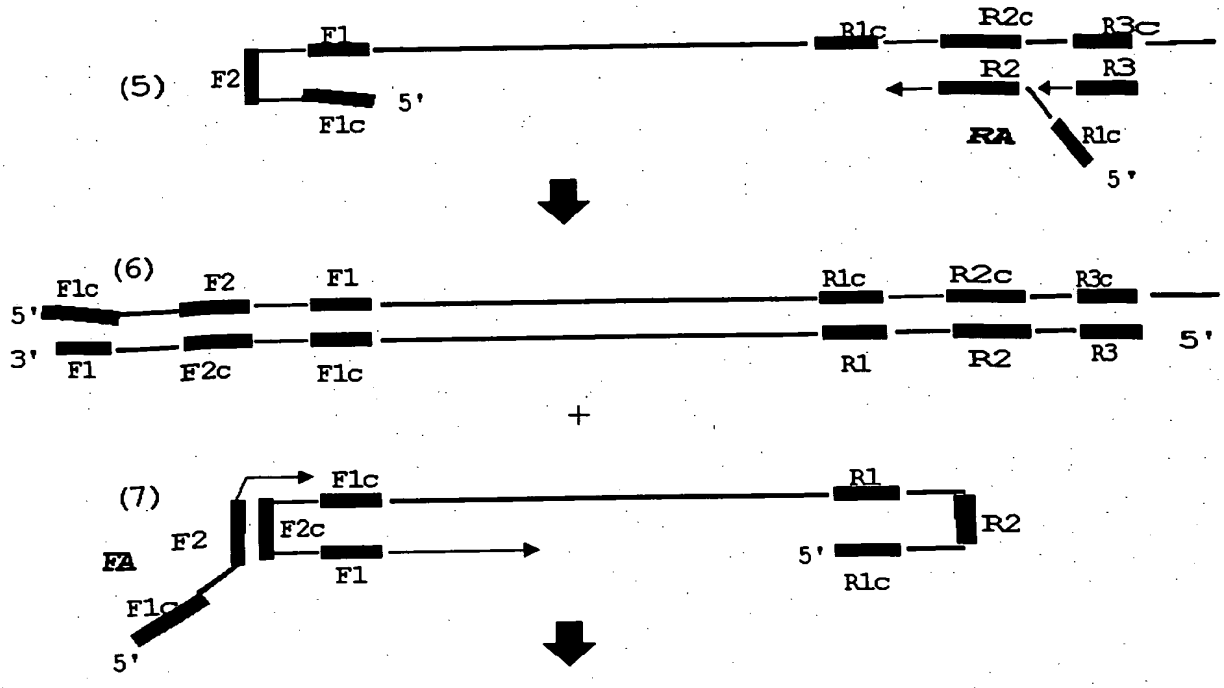

(5)
F2
F1
F1c
5'
R1c
R2c
R3c
R2
R3
RA
R1c
5'
(6)
F1c
5'
3'
F1
F2
F2c
F1
F1c
R1c
R2c
R3c
R1
R2
R3
5'
+
(7)
FA
F2
F1c
5'
F1c
F2c
F1
R1
R2
5'
R1c

Fig. 3

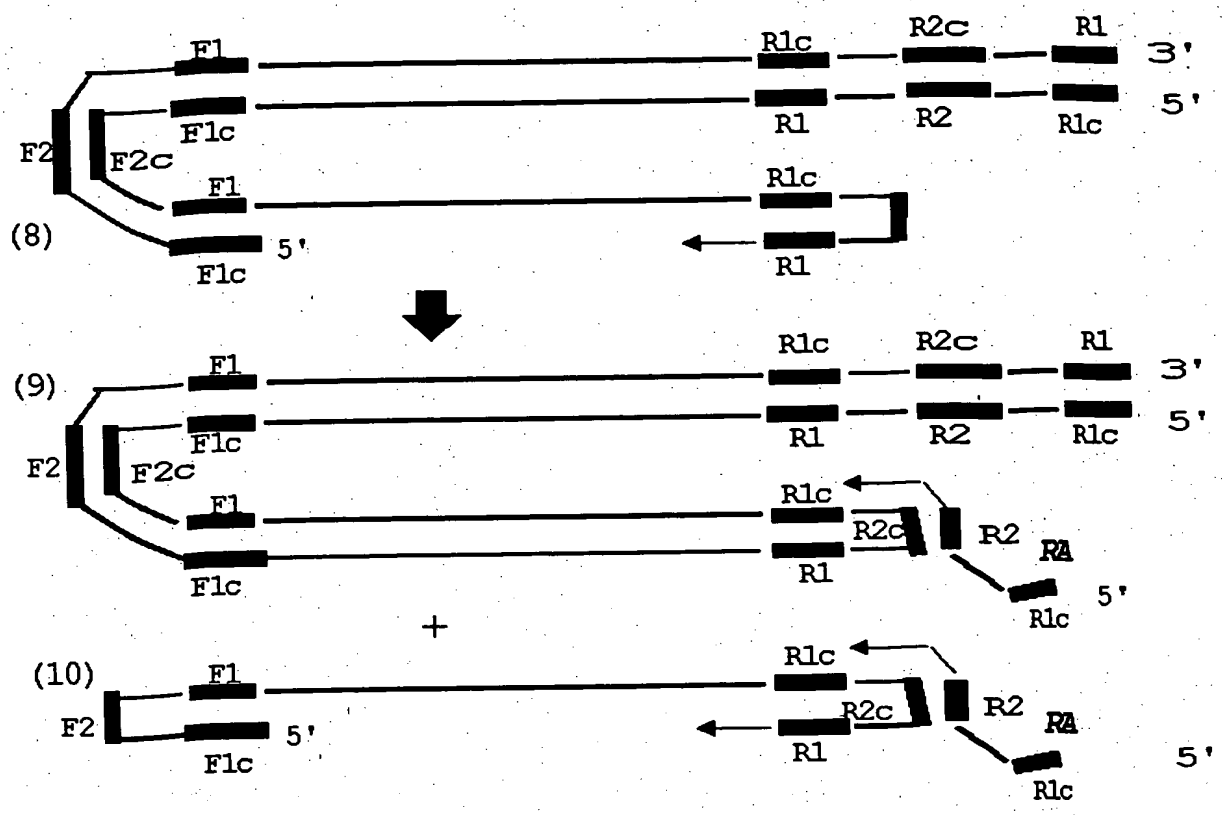

F1
F1c
F2
F2c
F1
F1c
5'
(8)
R1c
R2c
R1
3'
R1
R2
R1c
5'
R1c
R1
(9)
F1
F1c
F2
F2c
F1
F1c
R1c
R2c
R1
R1c
R2c
R1
3'
R1
R2
R1c
5'
R1c
R2c
R2
RA
R1
5'
R1c
+
(10)
F1
F2
5'
F1c
R1c
R2c
R2
RA
R1
5'
R1c

Fig. 4

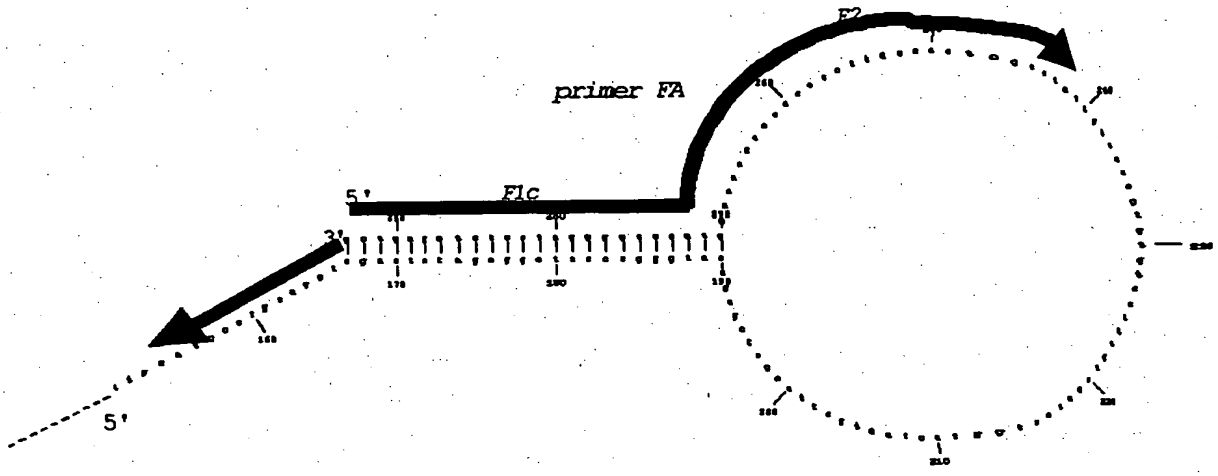


Fig. 5

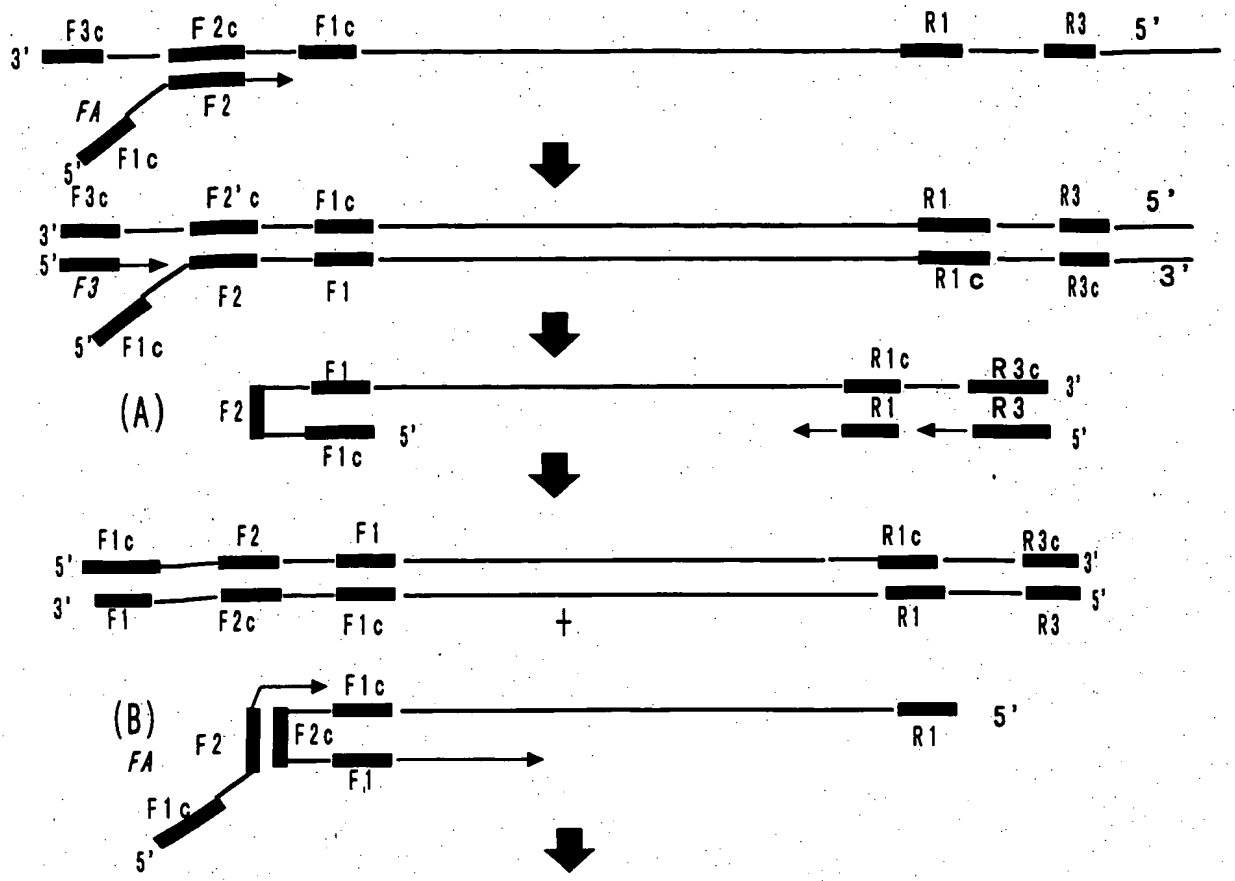

F3c
F2c
F1c
R1
R3
5'
3'
FA
F2
5'
F1c
F3c
F2'c
F1c
R1
R3
5'
3'
5'
F3
F2
F1
R1c
R3c
3'
5'
F1c
(A)
F2
F1
5'
F1c
R1c
R3c
3'
R1
R3
5'
F1c
F2
F1
R1c
R3c
5'
3'
F1
F2c
F1c
+
R1
R3
3'
5'
(B)
F1c
FA
F2
F2c
F1
R1
5'
F1c
5'

Fig. 6

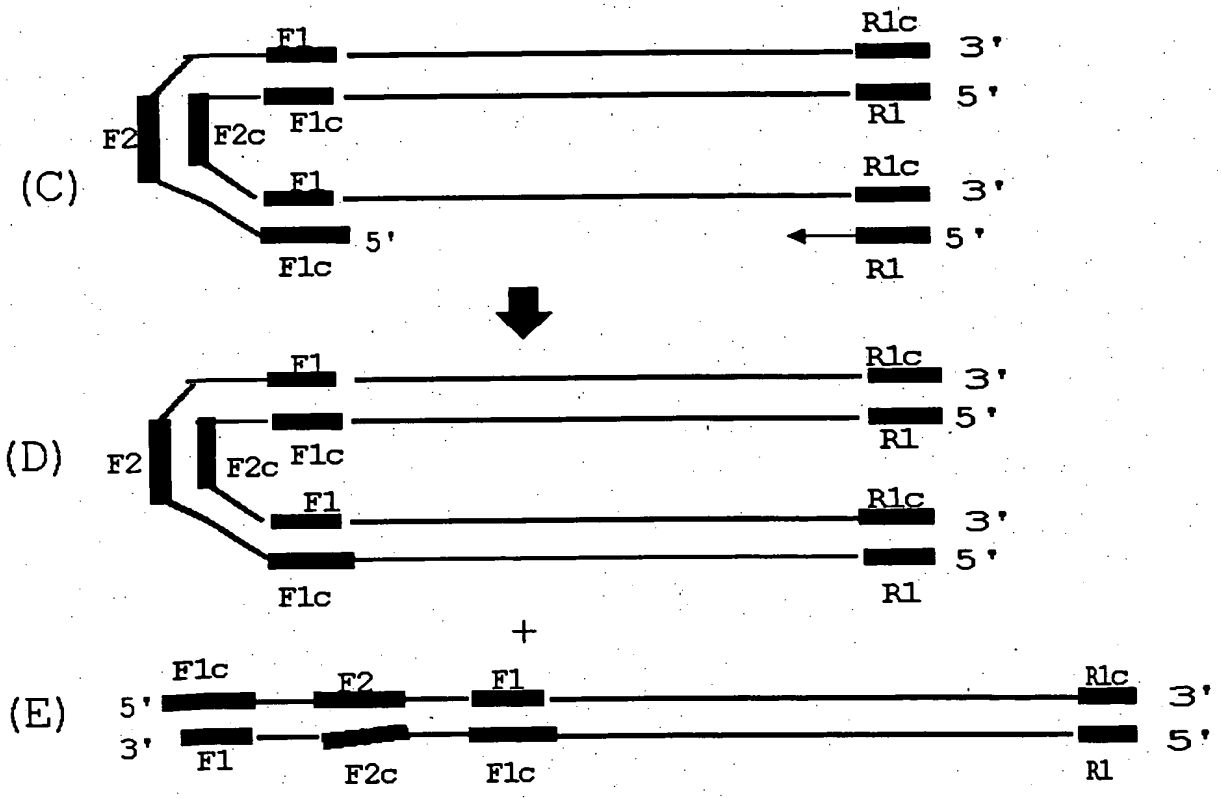
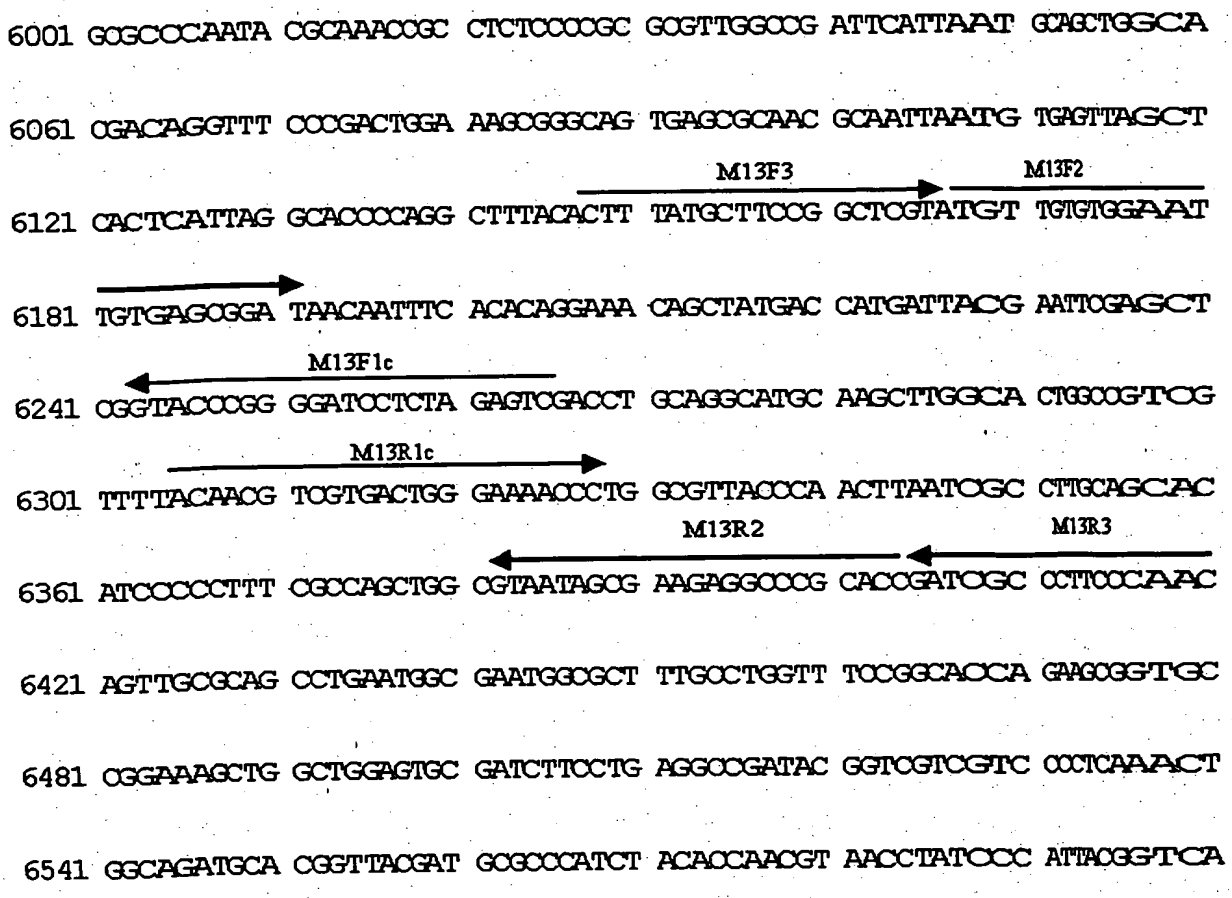

(C)
F1
R1c
3'
5'
F2
F2c
F1c
R1
F1
R1c
3'
5'
F1c
R1
(D)
F1
R1c
3'
5'
F2
F2c
F1c
R1
F1
R1c
3'
5'
F1c
R1
+
(E)
F1c
F2
F1
R1c
5'
3'
3'
5'
F1
F2c
F1c
R1

Fig. 7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M13F3
M13F2
6121 CACTCATTAG GCACCCCAGG CTTTACACTT TATGCTTCCG GCTCGTATGT TGTGTGGAAT
6181 TGTGAGCGGA TAACAATTTC ACACAGGAAA CAGCTATGAC CATGATTACG AATTCGAGCT
M13F1c
6241 CGGTACCCGG GGATCCTCTA GAGTCGACCT GCAGGCATGC AAGCTTGGCA CTGGCCGTCG
M13R1c
6301 TTTTACAACG TCGTGACTGG GAAAACCCTG GCGTTACCCA ACTTAATCGC CTTGCAGCAC
M13R2
M13R3
6361 ATCCCCCTTT CGCCAGCTGG CGTAATAGCG AAGAGGCCCG CACCGATCGC CCTTCCCAAC
6421 AGTTGCGCAG CCTGAATGGC GAATGGCGCT TTGCCTGGTT TCCGGCACCA GAAGCGGTGC
6481 CGGAAAGCTG GCTGGAGTGC GATCTTCCTG AGGCCGATAC GGTCGTCGTC CCCTCAAACT
6541 GGCAGATGCA CGGTTACGAT GCGCCCATCT ACACCAACGT AACCTATCCC ATTACGGTCA

Fig. 8

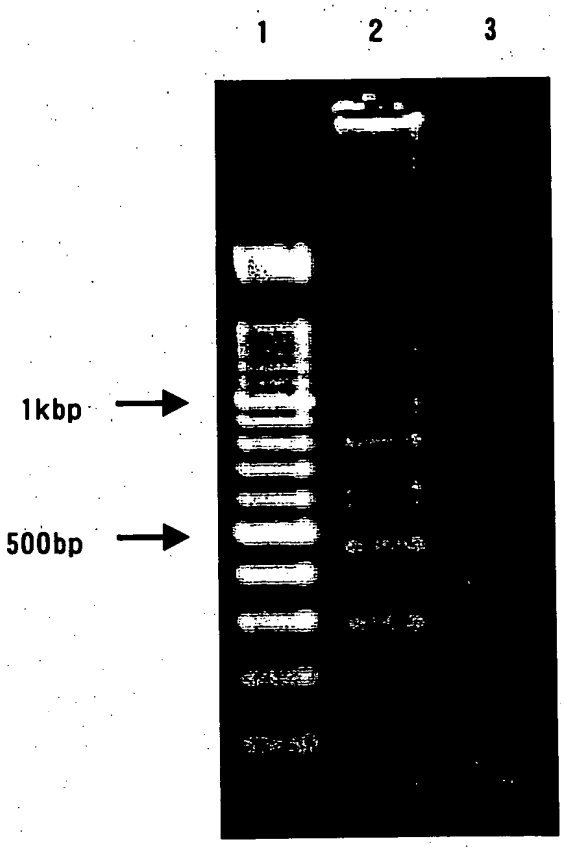


Fig. 9

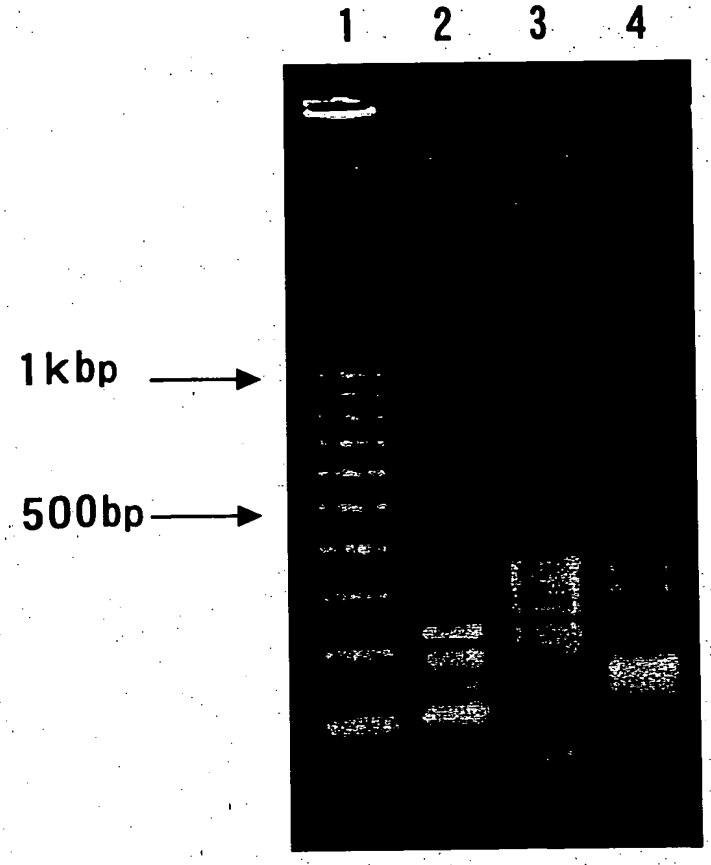


Fig. 10

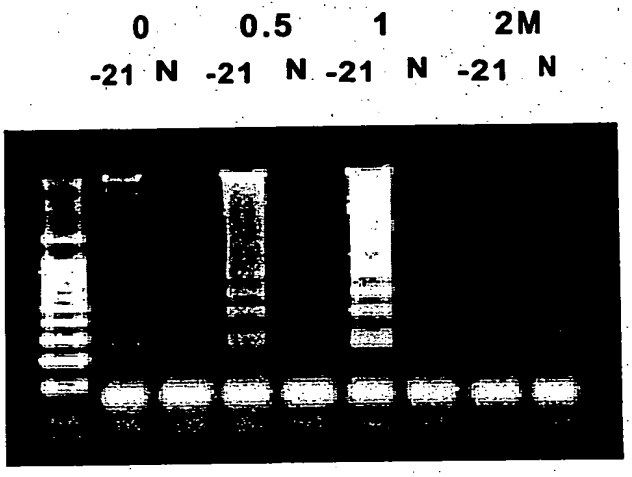
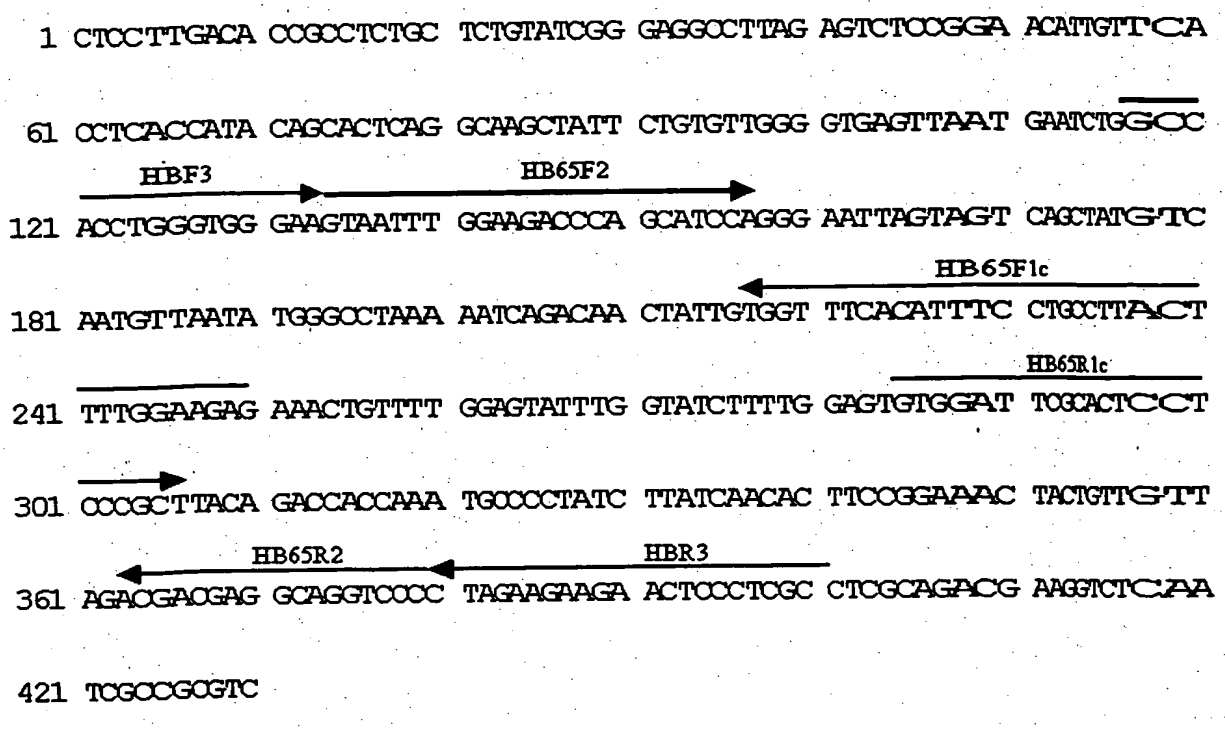


Fig. 11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HBF3
HB65F2
121 ACCTGGGTGG GAAGTAATTT GGAAGACCCA GCATCCAGGG AATTAGTAGT CAGCTATGTC
HB65F1c
181 AATGTTAATA TGGGCCTAAA AATCAGACAA CTATTGTGGT TTCACATTTC CTGCCTTACT
HB65R1c
241 TTTGGAAGAG AAACTGTTTT GGAGTATTTG GTATCTTTTG GAGTGTGGAT TCGCACTCCT
301 CCCGCTTACA GACCACCAAA TGCCCCTATC TTATCAACAC TTCCGGAAAC TACTGTTGTT
HB65R2
HBR3
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421 TCGCCGCGTC

Fig. 12

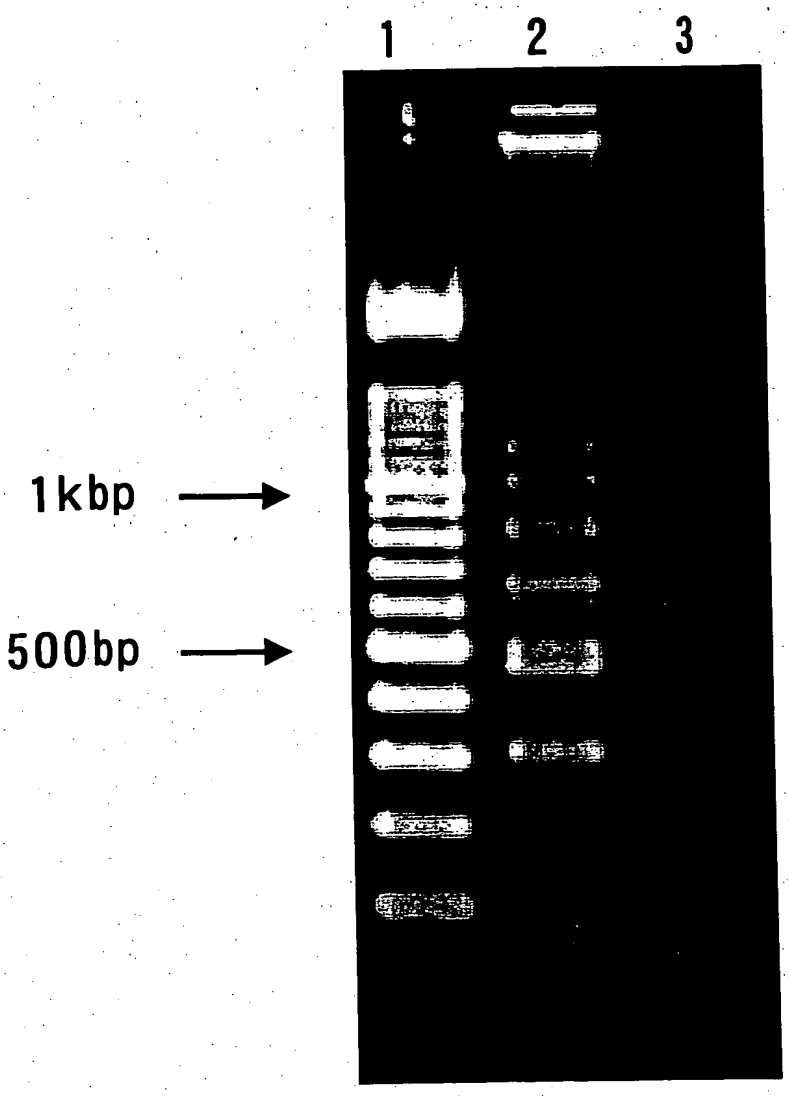


Fig. 13

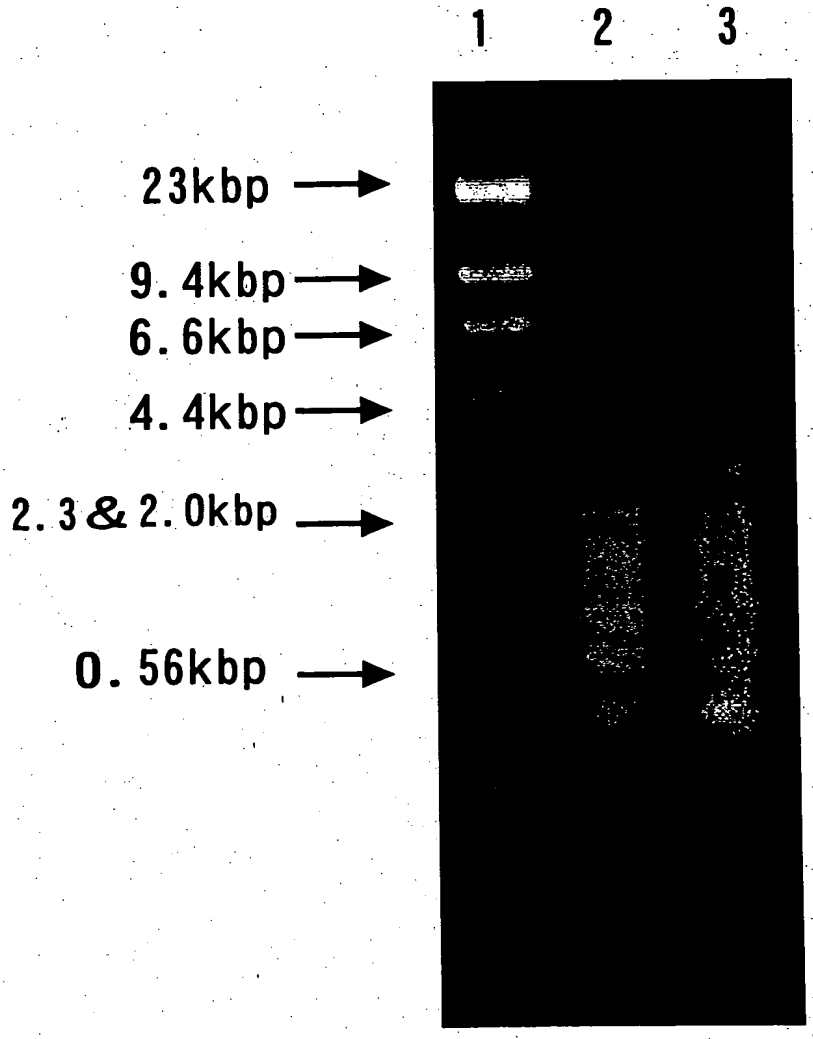


Fig. 14

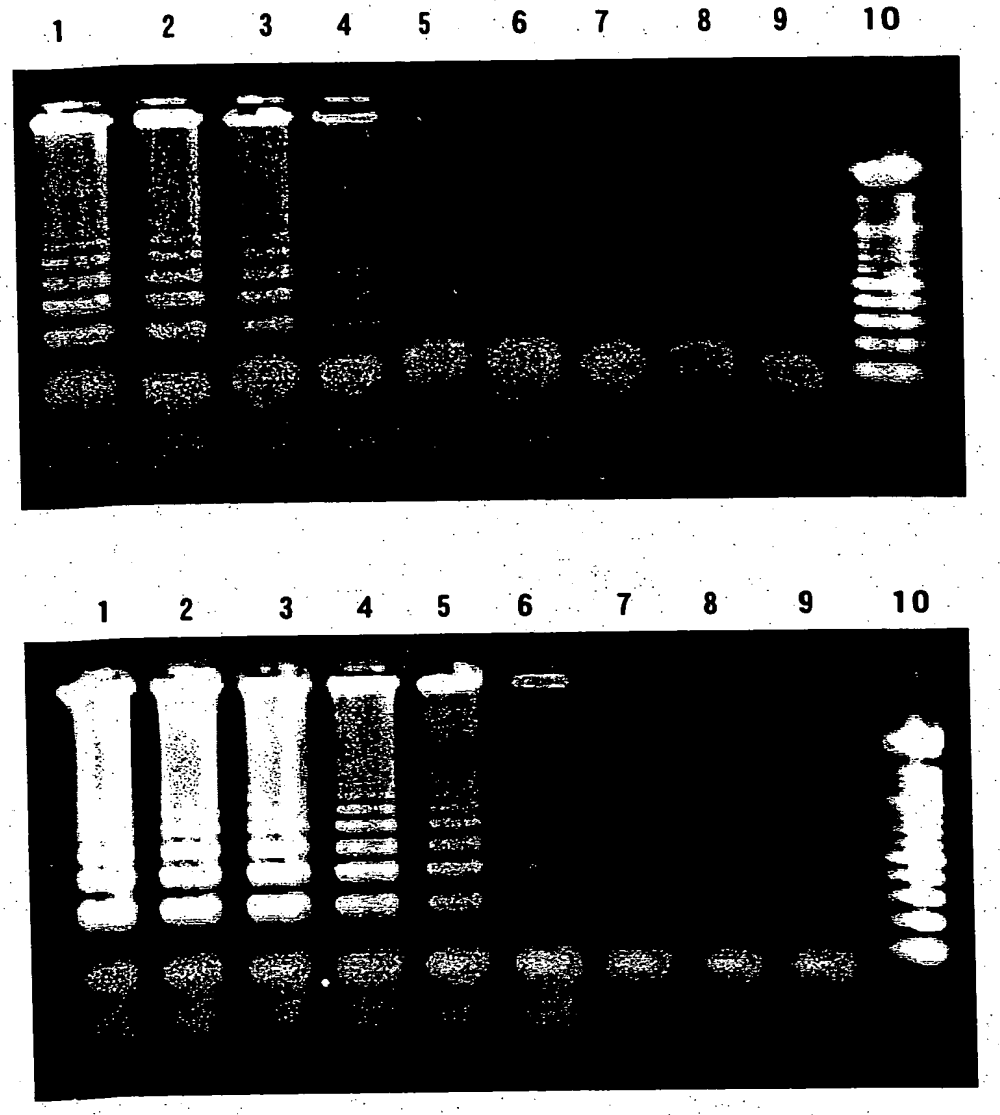
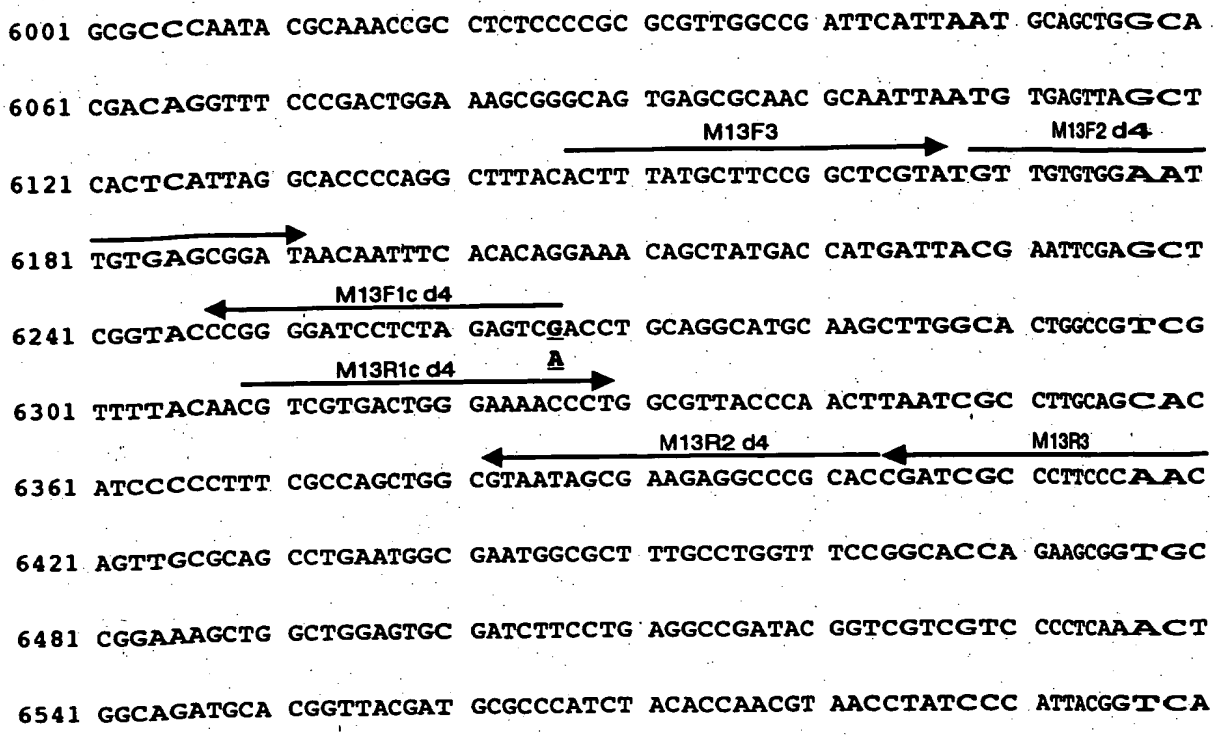


Fig. 15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6061 CGACAGGTTT CCCGACTGGA AAGCGGGCAG TGAGCGCAAC GCAATTAATG TGAGTTAGCT
M13F3
M13F2 d4
6121 CACTCATTAG GCACCCCAGG CTTTACACTT TATGCTTCCG GCTCGTATGT TGTGTGGAAT
6181 TGTGAGCGGA TAACAATTTC ACACAGGAAA CAGCTATGAC CATGATTACG AATTCGAGCT
M13F1c d4
6241 CGGTACCCGG GGATCCTCTA GAGTCGACCT GCAGGCATGC AAGCTTGGCA CTGGCCGTCG
M13R1c d4
A
6301 TTTTACAACG TCGTGACTGG GAAAACCCTG GCGTTACCCA ACTTAATCGC CTTGCAGCAC
M13R2 d4
M13R3
6361 ATCCCCCTTT CGCCAGCTGG CGTAATAGCG AAGAGGCCCG CACCGATCGC CCTTCCCAAC
6421 AGTTGCGCAG CCTGAATGGC GAATGGCGCT TTGCCTGGTT TCCGGCACCA GAAGCGGTGC
6481 CGGAAAGCTG GCTGGAGTGC GATCTTCCTG AGGCCGATAC GGTCGTCGTC CCCTCAAACT
6541 GGCAGATGCA CGGTTACGAT GCGCCCATCT ACACCAACGT AACCTATCCC ATTACGGTCA

Fig. 16

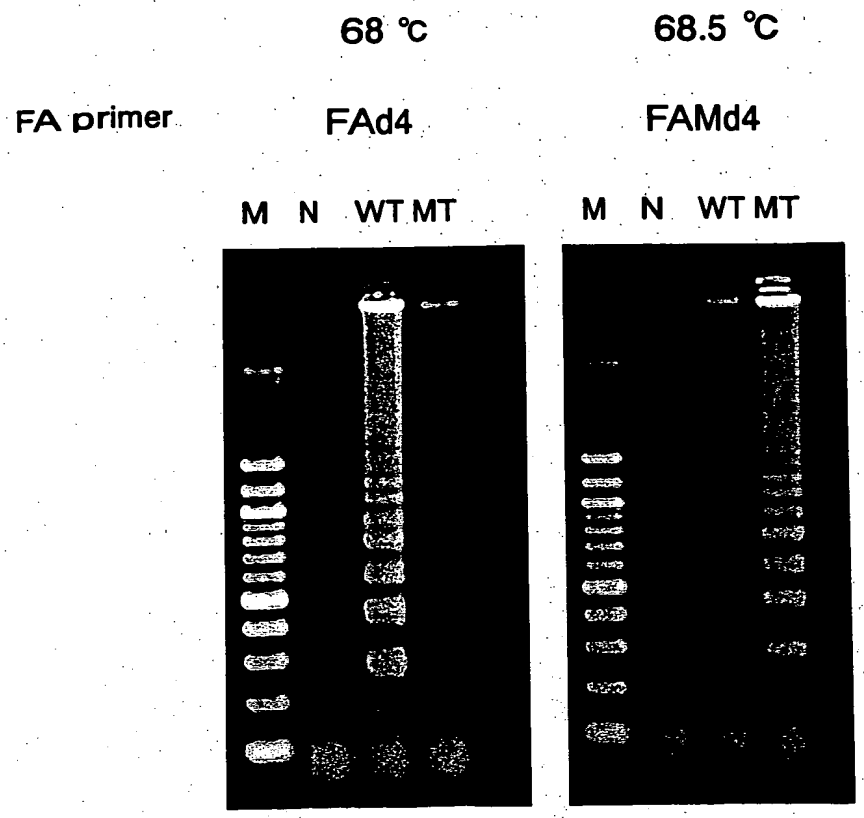
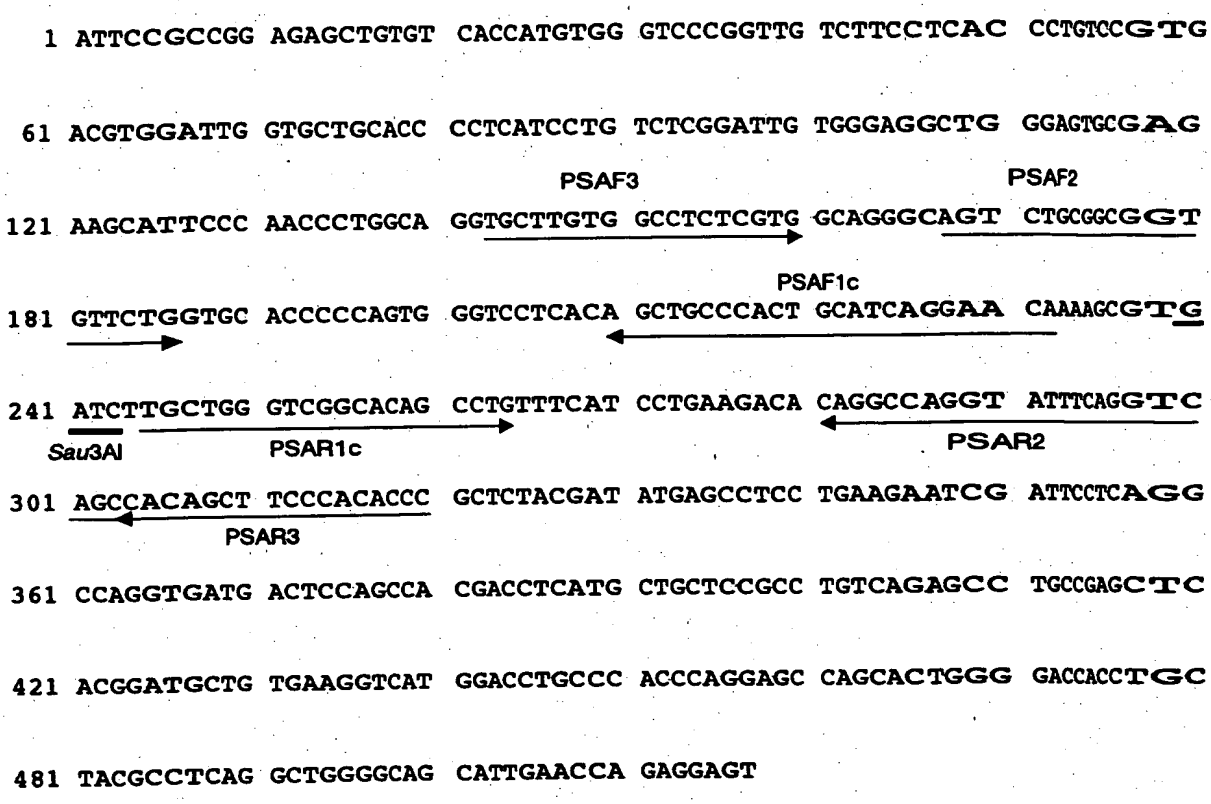


Fig. 17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PSAF3
PSAF2
121 AAGCATTCCC AACCCTGGCA GGTGCTTGTG GCCTCTCGTG GCAGGGCAGT CTGCGGCGGT
PSAF1c
181 GTTCTGGTGC ACCCCCAGTG GGTCCTCACA GCTGCCCACT GCATCAGGAA CAAAAGCGTG
241 ATCTTGCTGG GTCGGCACAG CCTGTTTCAT CCTGAAGACA CAGGCCAGGT ATTTCAGGTC
Sau3AI
PSAR1c
PSAR2
301 AGCCACAGCT TCCCACACCC GCTCTACGAT ATGAGCCTCC TGAAGAATCG ATTCCTCAGG
PSAR3
361 CCAGGTGATG ACTCCAGCCA CGACCTCATG CTGCTCCGCC TGTCAGAGCC TGCCGAGCTC
421 ACGGATGCTG TGAAGGTCAT GGACCTGCCC ACCCAGGAGC CAGCACTGGG GACCACCTGC
481 TACGCCTCAG GCTGGGGCAG CATTGAACCA GAGGAGT

Fig. 18